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Docket Number (Optional)
MST-1980.2

OFFICE OF PETITIONS

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

3. Terminal disclaimer with disclaimer fee


- ☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ _____ for a small entity or \$ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D))].

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January 20, 2004

Date


Signature

Telephone

Number: 914-524-2094

John M. Paolino
Typed or printed name

511 Benedict Avenue
Address

Enclosures: ☒ Fee Payment

Tarrytown, N.Y. 10591
Address

☒ Reply

☐ Terminal Disclaimer Form

☒ Additional sheets containing statements establishing unintentional delay

☒ Other: Fee Transmittal and Transmittal Form

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

Express Mail No. ER644767486 US

I hereby certify that this correspondence is being:

☒ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: **Mail Stop Petition**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

January 21, 2004
Date


Signature

Pamela Bailey
Type or printed name of person signing certificate

MSA-1980.3

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

JAN 28 2004

OFFICE OF PETITIONS

In re application of: Adolfsen et. al.

Serial No.: 09/541,663

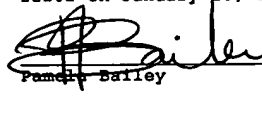
Group Art Unit: 1743

Filed: April 3, 2000

Examiner: B. Gordon

For: Method and Apparatus for
Controlling a Stream of
Liquid Test Packages in a
Capsule Chemistry System

I, Pamela Bailey, certify that this correspondence
is being deposited with Express Mail in an envelope
addressed to the Mail Stop Petition, Commissioner
for Patents, P. O. Box 1450, Alexandria, Virginia
22202 on January 20, 2004


Pamela Bailey

Attention: Office of Petitions
Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Renewed Petition Under 37 C.F.R. § 1.137(b)

The above-referenced application became abandoned on June 15, 2003. Applicant submitted a petition to revive the above-referenced application dated November 3, 2003 ("the Petition" attached hereto as Exhibit A). The petition sought to revive the application pursuant to 27 C.F.R. 1.137(b) as being abandoned due to unintentional delay.

The petition included a Submission Pursuant to 37 C.F.R. § 1.114 (Exhibit B) in response to the Office Action of March 14, 2003. Applicant intended the submission to accompany a Request for Continued Prosecution pursuant to 37 C.F.R. § 1.114 but inadvertently omitted the proper request.

On December 9, 2003, the Office of Petitions dismissed the Petition for failing to include the proper reply. In particular, the amendment submitted with the Petition was not deemed to place the claims in condition for allowance.

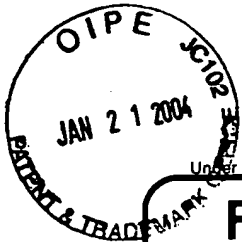
Applicant hereby renews its request to revive the above-referenced application via the enclosed form. A Request for Continued Examination accompanies the renewed Petition. Applicant requests the entry of the submission accompanying the original Petition and the grant of the renewed Petition.

Respectfully submitted,



John M. Paolino
Registration No. 40,340

Date: January 20, 2004
Bayer HealthCare LLC
511 Benedict Avenue
Tarrytown, NY 10591-5097
(914) 524-2552



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JAN 28 2004

OFFICE OF PETITIONS

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL
for FY 2003

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 2,100.00

Complete if Known

Application Number	09/541,663
Filing Date	April 3, 2000
First Named Inventor	Robert H. Adolfsen
Examiner Name	Brian R. Gordon
Group Art Unit	1743
Attorney Docket No.	MST-1980.2

METHOD OF PAYMENT

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number	13-3370
Deposit Account Name	Bayer HealthCare

- ☒
- Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

- 2.
- ☐
- Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Code (\$)	Small Entity Code (\$)	Fee Description	Fee Paid
101 710	201 355	Utility filing fee	
106 320	206 160	Design filing fee	
107 490	207 245	Plant filing fee	
108 710	208 355	Reissue filing fee	
114 150	214 75	Provisional filing fee	

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Code (\$)	Small Entity Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 80	202 40	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim, if not paid
109 80	209 40	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Code (\$)	Small Entity Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for ex parte reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 390	216 195	Extension for reply within second month	
117 890	217 445	Extension for reply within third month	
118 1,390	218 695	Extension for reply within fourth month	
128 1,890	228 945	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	1,330.00
141 1,240	241 620	Petition to revive - unintentional	
142 1,240	242 620	Utility issue fee (or reissue)	
143 440	243 220	Design issue fee	
144 600	244 300	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))	
179 710	279 355	Request for Continued Examination (RCE)	770.00
169 900	169 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 2,100.00

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	John M. Paolino	Registration No. (Attorney/Agent)	40,340	Telephone	914-524-2552
Signature		Date	1/21/2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



01-22-04

DAC #

Please type a plus sign (+) inside this box → ☐

PTO/SB/21 (08-00)

Approved for use through 10/31/2002, OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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JAN 28 2004

OFFICE OF PETITIONS

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/541,663
Filing Date	April 3, 2000
First Named Inventor	Adolfsen et al.
Group Art Unit	1743
Examiner Name	B. Gordon
Attorney Docket Number	MST-1980.2

ENCLOSURES (check all that apply)

- ☒ Fee Transmittal Form
- ☐ Fee Attached
- ☒ Amendment / Reply
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☐ Assignment Papers (for an Application)
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☒ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____

- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) (please identify below):

Remarks

Request for Continued Examination Statement pursuant to 37 CFR 1.137(b) Exhibit A and B

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name

John M. Paolino

Signature

Date

January 21, 2004

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 1/21/04

Typed or printed name

John M. Paolino - Reg. No. 40,340

Signature

Date

1/21/2004

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Adolfson et al.

: Examiner: B. Gordon

Serial No.: 09/541,663

: Group Art Unit: 1743

Filed: April 3, 2000

*Method and Apparatus for Controlling a
Stream of Liquid Test Packages in a Capsule
Chemistry Analysis System*

PETITION TO REVIVE FOR UNINTENTIONAL DELAY
PURSUANT TO 37 C.F.R. § 1.137(b)

Commissioner for Patents
2011 South Clark Place
Crystal Plaza Two, Lobby, Room 1B03
Alexandria, Virginia 22202

Sir:

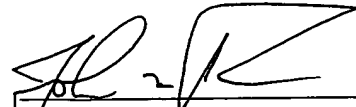
Pursuant to the provisions of 37 CFR 1.137(b), petition is hereby made for revival of the subject application which has been unintentionally delayed.

The entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition was unintentional.

The Commissioner is hereby authorized to charge any fees due in connection with the above-identified application to Deposit Account No. 13-3370.

The grant of this petition is respectfully requested.

Respectfully submitted,



JOHN M. PAOLINO
Registration No. 40,340

Bayer Corporation
511 Benedict Avenue
Tarrytown, NY 10591-5097
(914) 524-2093

Dated: October 31, 2003



MST-1980.3

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Adolfsen et. al.

Serial No.: 09/541,663


Group Art Unit: 1743

Filed: April 3, 2000

Examiner: B. Gordon

For: Method and Apparatus for
Controlling a Stream of
Liquid Test Packages in a
Capsule Chemistry System

I, Pamela Bailey, certify that this correspondence is being deposited with Federal Express as Overnight Mail in an envelope addressed to the Commissioner for Patents, 2011 South Clark Place, Crystal Plaza Two, Lobby, Room 1B03, Alexandria, Virginia 22202 on October 31, 2003


Pamela Bailey

Commissioner for Patents
2011 South Clark Place
Crystal Plaza Two, Lobby, Room 1B03
Alexandria, Virginia 22202

Submission Pursuant to 37 C.F.R. §1.114

Sir:

The following Amendment is submitted in response to the Office Action of March 14, 2003 (Paper No. 8) and accompanies Applicant's Petition to Revive for Unintentional Delay Pursuant to 37 C.F.R. § 1.1379(b).

Please amend the above identified application as follows:

MST-1980.3

PATENT

IN THE SPECIFICATION

No amendments.

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Please amend claim 52 as shown below.

Please cancel claims 55-57.

Please add new claim 58.

Please add new claim 59.

STATUS OF CLAIMS

Claims 1-51 (Previously Withdrawn from Consideration)

Claim 52 (Third Amendment) 52. A method for controlling a stream of liquid and air segments, comprising:

selectively aspirating liquid segments and air segments into a first fluid conduit in a plurality of cycles, each cycle beginning with the aspiration of a first air segment and ending with the aspiration of a final air segment, said first and final air segments [of] each having a volume;

actuating a valve so as to couple said first conduit to a second conduit;

transferring the liquid segments and the air segments of each of said plurality of cycles from said first fluid conduit to [a]

said second fluid conduit;

closing said valve in order to adjust[ing] the volume of the final air segment of each cycle after the final air segment has moved into said second fluid conduit;

actuating said valve so as to connect said second fluid conduit to a third fluid conduit;

transferring the liquid segments and the air segments of each of said plurality of cycles from said second fluid conduit to a third fluid conduit; [and]

detecting an interface between a final liquid segment and the final air segment;

stopping the flow of said liquid segments and air segments and closing said valve in response to the detection of said interface so as to adjust[ing] the volume of the first air segment of each cycle [after the first air segment has moved into said third fluid conduit wherein] whereby the volume of the final air segment is adjusted to equal an optimal volume. [; and

wherein said volume of the first air segment is adjusted according to a feedback loop.]

Claim 53-54 (Previously Cancelled)

Claim 55-57. (Cancelled)

Claim 58 (New) The method of claim 52 further comprising the steps of flowing the liquid segments and air segments of each of said plurality of cycles in a forward and reverse direction in said third fluid conduit past a detector placed at a pre-determined point along said third fluid conduit.

Claim 59 (New) The method of claim 58 wherein said interface is detected when said plurality of cycles are flowing in a reverse direction.

Claim 60 (New) The method of claim 52 wherein upon detection of the interface flow is stopped and the valve is closed after a pre-determined time delay, said delay being normalized around a predetermined nominal center point delay according to a feedback loop.

REMARKS

Claims 55-57 have been cancelled without prejudice. Claim 52 and new claims 58-59 are pending in this application. In the Office Action of March 14, 2003 Claims 52-57 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In addition, claims 52-57 have been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,399,497 -Kumar.

Reconsideration and withdrawal of the rejections and objections are requested for the reasons stated below.

35 U.S.C. § 112 Rejections

Claim 52 has been amended to more particularly point out the subject matter the applicant considers to be the invention. In particular, it is now clear that the valve is actuated to connect the first conduit to the second conduit. As clearly stated in the specification, the first air segment then flows into the second conduit first and the last air segment flows into the conduit last. Thus, the order of flow out of the second conduit is first in last out. The valve is then closed. This has the effect of truncating the last air segment and adjusting its volume. (See Specification Pg. 5, Lines 8-16)

The valve is actuated again to connect the second conduit with the third conduit. The segments are then flowed into the third conduit. (See Specification Pg. 5, Lines 17-23.) An interface between the final air segment and a final liquid segment is detected. The detection of this interface is fed back to the valve control whereby the valve is closed so as to truncate the volume of the first air segment. (See Specification Pg. 20, Lines 9-15.)

New claims 58-59 add the steps of having the plurality of fluid and air segments flowing in a forward and reverse direction in the third fluid conduit. The interface is detected when the flow is reversed, i.e. back towards the valve. At this point, the flow is stopped and the valve is closed after a pre-determined time delay. This time delay is normalized around a predetermined nominal center point delay according to a feedback loop. (See Specification Pg. 20, Lines 17-23 to Pg. 22, Lines 1-19)

No new matter has been added to the claims. Support for the amendments can be found in the Specification at the pages noted above. Claim 52 clearly and distinctly claims the subject matter that the applicant considers the invention and does not omit any essential steps. Accordingly, it is respectfully requested that the amendments be entered and the rejection of claim 52 under 35 U.S.C. §112, second paragraph be withdrawn.

35 U.S.C. § 103 Rejections

Claim 52 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Kumar. The apparatus of Kumar features a plurality of fluid conduits that are lined with an isolation liquid. Test packages, which comprise a plurality of liquid and air segments, are aspirated into a first fluid conduit. Each test package occupies a given length of the fluid conduit. As new test packages are moved into the first conduit, the previous test packages are gradually moved from the first conduit into a second conduit.

When one of the previous test packages reach a predetermined point in the second conduit, a valve is actuated and the test package is transferred to a third fluid conduit. During these operations, it is crucial that the test package be precisely positioned within the conduits. Thus, ideally, each test package should be the same length so that the control of the stream can be precisely timed.

Unfortunately, the length of the liquid segments of the test packages vary. This is caused by variations in the surface tensions of the liquids which make up each liquid segment. Thus, each liquid segment interacts differently with the isolation liquid. (See Page 9, Lines 1-10 of the Specification). Thus,

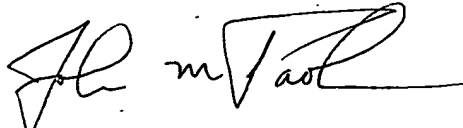
liquid segments having different physical properties will have different lengths. This adversely affects the length of the overall test packages, so that it may be out of position relative to, for example, the luminometer.

In order to solve this problem, the present invention employs a method that adjusts the volume of the air segments, thus adjusting the overall length of the test packages. In addition, a feed back loop is employed in conjunction with the means for adjusting the volume so as to avoid adversely affecting the next successive test package. In this manner it is assured that the liquid segments are accurately positioned within the conduits. This method is not disclosed or suggested by Kumar. Indeed, Kumar exhibits the very shortcomings that the present invention seeks to overcome. Thus, it would not be obvious to one of ordinary skill in the art modify Kumar to obtain the present invention.

CONCLUSION

Every effort has been made to particularly and distinctly define the subject matter of the invention. The claims are definite, and are patentable over the prior art of record. For all the foregoing reasons, the differences between the invention and the prior art of record are such that the subject matter claimed as a whole is patentable over the prior art cited by the Examiner. Reconsideration, and allowance of the pending claims, are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'John M. Paolino', with a stylized flourish at the end.

John M. Paolino
Registration No. 40,340

Date: October 31, 2003
Bayer HealthCare LLC
511 Benedict Avenue
Tarrytown, NY 10591-5097
(914) 524-2552